

CLAIMS

What is claimed is:

1. A method for detecting the presence of FMDV in a sample,
5 the method comprising:
 - (a) performing RT-PCR amplification of the sample using at least one primer pair selected from the group consisting of:
 - (i) SEQ ID NOs:16 and 17,
 - (ii) SEQ ID NOs:16 and 18,
 - 10 (iii) SEQ ID NOs:16 and 19, and
 - (iv) SEQ ID NOs:16 and 20,to produce an RT-PCR amplification result; and
 - (b) examining the RT-PCR amplification result of step (a) to detect for an amplification product of the primer pair, whereby a positive
15 detection of the amplification product indicates the presence of FMDV in the sample.
2. The method of claim 1, wherein in step (b) a melting curve analysis is used to detect for an amplification product.
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3. The method of claim 1, further comprising a step of extracting RNA from the sample prior to said step (a).
4. An isolated polynucleotide for detection of FMDV comprising
25 SEQ ID NO:16, SEQ ID NO:17, SEQ ID NO:18, SEQ ID NO:19, or SEQ ID NO:20.
5. A kit for detection of FMDV, comprising:
 - (a) at least one primer pair selected from the group consisting
30 essentially of:
 - (i) SEQ ID NOs:16 and 17,
 - (ii) SEQ ID NOs:16 and 18,
 - (iii) SEQ ID NOs:16 and 19, and
 - (iv) SEQ ID NOs:16 and 20;
 - 35 (b) reverse transcriptase; and
 - (c) thermostable DNA polymerase.

6. A replication composition for use in performance of RT-PCR, comprising:
- (a) at least one primer pair selected from the group consisting essentially of:
- 5 (i) SEQ ID NOs:16 and 17,
(ii) SEQ ID NOs:16 and 18,
(iii) SEQ ID NOs:16 and 19, and
(iv) SEQ ID NOs:16 and 20;
(b) reverse transcriptase; and
10 (c) thermostable DNA polymerase.
7. A tablet comprising the replication composition of claim 6.
8. A kit for detection of FMDV in a sample, comprising the
15 tablet of claim 6.